6560-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### **40 CFR Part 52**

[EPA-R02-OAR-2021-0673; EPA-HQ-OAR-2021-0663; FRL-9424-01-R2]

Air Plan Disapproval; New York and New Jersey; Interstate Transport of Air Pollution for the 2015 8-hour Ozone National Ambient Air Quality Standards

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

SUMMARY: Pursuant to the Federal Clean Air Act (CAA or the Act), the Environmental Protection Agency (EPA) is proposing to disapprove State Implementation Plan (SIP) submittals from New York and New Jersey regarding interstate transport for the 2015 8-hour ozone national ambient air quality standards (NAAQS). This provision requires that each state's SIP contain adequate provisions to prohibit emissions from within the state from significantly contributing to nonattainment or interfering with maintenance of the NAAQS in other states. The "good neighbor" or "interstate transport" requirement is part of the broader set of "infrastructure" requirements, which are designed to ensure that the structural components of each state's air quality management program are adequate to meet the state's responsibilities under the CAA. This disapproval, if finalized, will establish a 2-year deadline for the EPA to promulgate a Federal Implementation Plan (FIP) to address the relevant interstate transport requirements, unless the EPA approves a subsequent SIP submittal that meets these requirements. Disapproval does not start a mandatory sanctions clock.

**DATES:** Comments: Written comments must be received on or before [insert date 60 days after date of publication in the Federal Register].

**ADDRESSES:** You may send comments, identified as Docket No. **EPA-R02-OAR-2021-0673** to the Federal eRulemaking Portal at *https://www.regulations.gov* following the online instructions for submitting comments.

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to https://www.regulations.gov, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the "Public Participation" heading of the SUPPLEMENTARY INFORMATION section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are open to the public by appointment only to reduce the risk of transmitting COVID-19. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. For further information on the EPA Docket Center services and the current status, please visit us online at https://www.epa.gov/dockets.

**FOR FURTHER INFORMATION CONTACT:** Kenneth Fradkin, Environmental Protection Agency, Region 2, 290 Broadway, 25<sup>th</sup> Floor, New York, NY 10007-1866, (212) 637-3702, or by email at Fradkin.Kenneth@epa.gov.

SUPPLEMENTARY INFORMATION: Public Participation: Submit your comments, identified by Docket ID No. EPA-R02-OAR-2021-0673 at https://www.regulations.gov. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit to the EPA's docket at https://www.regulations.gov any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish

to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system).

There are two dockets supporting this action, EPA-R02-OAR-2021-0673 and EPA-HQ-OAR-2021-0663. Docket No. EPA-R02-OAR-2021-0673 contains information specific to New York and New Jersey, including the notice of proposed rulemaking. Docket No. EPA-HQ-OAR-2021-0663 contains additional modeling files, emissions inventory files, technical support documents, and other relevant supporting documentation regarding interstate transport of emissions for the 2015 8-hour ozone NAAOS which are being used to support this action. All comments regarding information in either of these dockets are to be made in Docket No. EPA-R02-OAR-2021-0673. For additional submission methods, please contact Kenneth Fradkin, Environmental Protection Agency, 290 Broadway, 25th Floor, New York, 10007-1866, (212) 637-3702, or by email at Fradkin.Kenneth@epa.gov. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets. Due to public health concerns related to COVID-19, the EPA Docket Center and Reading Room are open to the public by appointment only. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. For further information and updates on the EPA Docket Center services, please visit us online at https://www.epa.gov/dockets.

The EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that we can respond rapidly as conditions change regarding COVID-19.

The index to the docket for this action, Docket No. EPA-R02-OAR-2021-0673, is available electronically at *www.regulations.gov*. While all documents in the docket are listed in the index,

some information may not be publicly available due to docket file size restrictions or content (e.g., CBI).

Throughout this document, "we," "us," and "our" means the EPA.

## I. Background

## A. Description of Statutory Background

On October 1, 2015, the EPA promulgated a revision to the ozone NAAQS (2015 8-hour ozone NAAQS), lowering the level of both the primary and secondary standards to 0.070 parts per million (ppm). Section 110(a)(1) of the CAA requires states to submit, within 3 years after promulgation of a new or revised standard, SIP submissions meeting the applicable requirements of section 110(a)(2).<sup>2</sup> One of these applicable requirements is found in CAA section 110(a)(2)(D)(i)(I), otherwise known as the "interstate transport" or "good neighbor" provision, which generally requires SIPs to contain adequate provisions to prohibit in-state emissions activities from having certain adverse air quality effects on other states due to interstate transport of pollution. There are two so-called "prongs" within CAA section 110(a)(2)(D)(i)(I). A SIP for a new or revised NAAQS must contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting air pollutants in amounts that will significantly contribute to nonattainment of the NAAOS in another state (prong 1) or interfere with maintenance of the NAAQS in another state (prong 2). The EPA and states must give independent significance to prong 1 and prong 2 when evaluating downwind air quality problems under CAA section 110(a)(2)(D)(i)(I).<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> National Ambient Air Quality Standards for Ozone, Final Rule, 80 FR 65292 (October 26, 2015). Although the level of the standard is specified in the units of ppm, ozone concentrations are also described in parts per billion (ppb). For example, 0.070 ppm is equivalent to 70 ppb.

<sup>&</sup>lt;sup>2</sup> SIP revisions that are intended to meet the applicable requirements of section 110(a)(1) and (2) of the CAA are often referred to as infrastructure SIPs and the applicable elements under section 110(a)(2) are referred to as infrastructure requirements.

<sup>&</sup>lt;sup>3</sup> See North Carolina v. EPA, 531 F.3d 896, 909-11 (D.C. Cir. 2008).

The EPA is using the 4-step interstate transport framework (or 4-step framework) to evaluate the states' SIP submittals addressing the interstate transport provision for the 2015 8-hour ozone NAAQS. The EPA has addressed the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) with respect to prior ozone NAAQS in several regional regulatory actions, including the Cross-State Air Pollution Rule (CSAPR), which addressed interstate transport with respect to the 1997 ozone NAAQS as well as the 1997 and 2006 fine particulate matter standards,<sup>4</sup> and the Cross-State Air Pollution Rule Update (CSAPR Update)<sup>5</sup> and the Revised CSAPR Update, both of which addressed the 2008 ozone NAAQS.<sup>6</sup>

Through the development and implementation of the CSAPR rulemakings and prior regional rulemakings pursuant to the interstate transport provision,<sup>7</sup> the EPA, working in partnership with states, developed the following 4-step interstate transport framework to evaluate a State's obligations to eliminate interstate transport emissions under the interstate transport provision for the ozone NAAQS: (1) Identify monitoring sites that are projected to have problems attaining and/or maintaining the NAAQS (i.e., nonattainment and/or maintenance receptors); (2) identify states that impact those air quality problems in other (i.e., downwind) states sufficiently such that the states are considered "linked" and therefore warrant further

<sup>1</sup> Soo Federal Implemen

<sup>&</sup>lt;sup>4</sup> See Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (Aug. 8, 2011).

<sup>&</sup>lt;sup>5</sup> Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 81 FR 74504 (Oct. 26, 2016).

<sup>&</sup>lt;sup>6</sup> In 2019, the D.C. Circuit Court of Appeals remanded the CSAPR Update to the extent it failed to require upwind states to eliminate their significant contribution by the next applicable attainment date by which downwind states must come into compliance with the NAAQS, as established under CAA section 181(a). *Wisconsin v. EPA*, 938 F.3d 303, 313 (D.C. Cir. 2019). The Revised CSAPR Update for the 2008 Ozone NAAQS, 86 FR 23054 (April 30, 2021), responded to the remand of the CSAPR Update in *Wisconsin* and the vacatur of a separate rule, the "CSAPR Close-Out," 83 FR 65878 (December 21, 2018), in *New York v. EPA*, 781 F. App'x. 4 (D.C. Cir. 2019).

<sup>&</sup>lt;sup>7</sup> In addition to the CSAPR rulemakings, other regional rulemakings addressing ozone transport include the "NO<sub>x</sub> SIP Call," 63 FR 57356 (October 27, 1998), and the "Clean Air Interstate Rule" (CAIR), 70 FR 25162 (May 12, 2005).

review and analysis; (3) identify the emissions reductions necessary (if any), applying a multifactor analysis, to eliminate each linked upwind state's significant contribution to nonattainment or interference with maintenance of the NAAQS at the locations identified in Step 1; and (4) adopt permanent and enforceable measures needed to achieve those emissions reductions.

C. Background on the EPA's Ozone Transport Modeling Information

In general, the EPA has performed nationwide air quality modeling to project ozone design values which are used in combination with measured data to identify nonattainment and maintenance receptors. To quantify the contribution of emissions from specific upwind states on 2023 ozone design values for the identified downwind nonattainment and maintenance receptors, the EPA performed nationwide, state-level ozone source apportionment modeling for 2023. The source apportionment modeling provided contributions to ozone at receptors from precursor emissions of anthropogenic nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) in individual upwind states.

The EPA has released several documents containing projected ozone design values, contributions, and information relevant to evaluating interstate transport with respect to the 2015 8-hour ozone NAAQS. First, on January 6, 2017, the EPA published a notice of data availability (NODA) in which we requested comment on preliminary interstate ozone transport data including projected ozone design values and interstate contributions for 2023 using a 2011 base year platform. In the NODA, the EPA used the year 2023 as the analytic year for this preliminary modeling because that year aligns with the expected attainment year for Moderate ozone nonattainment areas for the 2015 8-hour ozone NAAQS. On October 27, 2017, we released a memorandum (October 2017 memorandum) containing updated modeling data for

<sup>&</sup>lt;sup>8</sup> See Notice of Availability of the Environmental Protection Agency's Preliminary Interstate Ozone Transport Modeling Data for the 2015 8-hour Ozone National Ambient Air Quality Standard (NAAQS), 82 FR 1733 (January 6, 2017).

<sup>&</sup>lt;sup>9</sup> 82 FR at 1735.

2023, which incorporated changes made in response to comments on the NODA, and noted that the modeling may be useful for states developing SIPs to address interstate transport obligations for the 2008 ozone NAAQS.<sup>10</sup> On March 27, 2018, we issued a memorandum (March 2018 memorandum) noting that the same 2023 modeling data released in the October 2017 memorandum could also be useful for identifying potential downwind air quality problems with respect to the 2015 8-hour ozone NAAQS at Step 1 of the 4-step interstate transport framework.<sup>11</sup> The March 2018 memorandum also included the then newly available contribution modeling data for 2023 to assist states in evaluating their impact on potential downwind air quality problems for the 2015 8-hour ozone NAAQS under Step 2 of the 4-step interstate transport framework. 12 The EPA subsequently issued two more memoranda in August and October 2018, providing additional information to states developing interstate transport SIP submissions for the 2015 8-hour ozone NAAQS concerning, respectively, potential contribution thresholds that may be appropriate to apply in Step 2 of the 4-step interstate transport framework, and considerations for identifying downwind areas that may have problems maintaining the standard at Step 1 of the 4-step interstate transport framework.<sup>13</sup>

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<sup>&</sup>lt;sup>10</sup> See Information on the Interstate Transport State Implementation Plan Submissions for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I), October 27, 2017, available in Docket ID No. EPA-HQ-OAR-2021-0663. 
<sup>11</sup> See Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I), March 27, 2018 ("March 2018 memorandum"), available in Docket ID No. EPA-HQ-OAR-2021-0663.

<sup>&</sup>lt;sup>12</sup> The March 2018 memorandum, however, provided, "While the information in this memorandum and the associated air quality analysis data could be used to inform the development of these SIPs, the information is not a final determination regarding states' obligations under the good neighbor provision. Any such determination would be made through notice-and-comment rulemaking."

<sup>&</sup>lt;sup>13</sup> See Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards, August 31, 2018) ("August 2018 memorandum"), and Considerations for Identifying Maintenance Receptors for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards, October 19, 2018, available in Docket ID No. EPA-HQ-OAR-2021-0663.

Since the release of the modeling data shared in the March 2018 memorandum, the EPA performed updated modeling using a 2016-based emissions modeling platform (i.e., 2016v1).

This emissions platform was developed under the EPA/Multi-Jurisdictional Organization (MJO)/state collaborative project. This collaborative project was a multi-year joint effort by the EPA, MJOs, and states to develop a new, more recent emissions platform for use by the EPA and states in regulatory modeling as an improvement over the dated 2011-based platform that the EPA had used to project ozone design values and contribution data provided in the 2017 and 2018 memoranda. The EPA used the 2016v1 emissions to project ozone Design values and contributions for 2023. On October 30, 2020, in the Notice of Proposed Rulemaking for the Revised CSAPR Update, the EPA released and accepted public comment on 2023 modeling that used the 2016v1 emissions platform. Although the Revised CSPAR Update addressed transport for the 2008 ozone NAAQS, the projected design values and contributions from the 2016v1 platform are also useful for identifying downwind ozone problems and linkages with respect to the 2015 ozone NAAQS.

Following the final Revised CSAPR Update, the EPA made further updates to the 2016 emissions platform to include mobile emissions from the EPA's Motor Vehicle Emission Simulator MOVES3 model<sup>17</sup> and updated emissions projections for electric generating units (EGUs) that reflect the emissions reductions from the Revised CSAPR Update, recent information on plant closures, and other sector trends. The construct of the updated emissions platform, 2016v2, is described in the Emissions Modeling technical support document (TSD) for this proposed rule. The EPA performed air quality modeling of the 2016v2 emissions using the

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<sup>&</sup>lt;sup>14</sup> The results of this modeling, as well as the underlying modeling files, are included in Docket ID No. EPA-HQ-OAR-2021-0663.

<sup>&</sup>lt;sup>15</sup> See 85 FR 68964, 68981.

<sup>&</sup>lt;sup>16</sup> See the Air Quality Modeling Technical Support Document for the Final Revised Cross-State Air Pollution Rule Update included in the Headquarters Docket ID No. EPA- HQ-OAR-2021-0663.

<sup>&</sup>lt;sup>17</sup> Additional details and documentation related to the MOVES3 model can be found at https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves.

most recent public release version of the Comprehensive Air Quality Model with Extensions (CAMx) photochemical modeling, version 7.10.<sup>18</sup> The EPA now proposes to primarily rely on modeling based on the updated and newly available 2016v2 emissions platform in evaluating these submissions with respect to Steps 1 and 2 of the 4-step interstate transport framework. By using the updated modeling results, the EPA is using the most current and technically appropriate information for this proposed rulemaking. Section III of this notice and the Air Quality Modeling TSD for 2015 Ozone NAAQS Transport SIP Proposed Actions included in Docket ID No. EPA-HQ-OAR-2021-0663 for this proposal contains additional detail on the EPA's 2016v2 modeling. In this notice, the EPA is accepting public comment on this updated 2023 modeling, which uses a 2016v2 emissions platform. Comments on the EPA's air quality modeling should be submitted in the Regional docket for this action, Docket No. EPA-R02-OAR-2021-0663. Comments are not being accepted in Docket EPA-HQ-OAR-2021-0663.

In some cases, states may rely on the results of EPA modeling and/or alternative modeling performed by states or Multi-Jurisdictional Organizations (MJOs) to evaluate downwind air quality problems and contributions as part of their submissions. New York and New Jersey have done so, and so we have evaluated the use of that alternative modeling in Section III.

D. The EPA's Approach to Evaluating Interstate Transport SIPs for the 2015 8-hour ozone NAAQS

The EPA proposes to apply a consistent set of policy judgments across all states for purposes of evaluating interstate transport obligations and the approvability of interstate transport SIP submittals for the 2015 8-hour ozone NAAQS. These policy judgments reflect consistency with relevant case law and past agency practice as reflected in the CSAPR and related rulemakings. Nationwide consistency in approach is particularly important in the context

<sup>&</sup>lt;sup>18</sup> Ramboll Environment and Health, January 2021, www.camx.com

of interstate ozone transport, which is a regional-scale pollution problem involving many smaller contributors. Effective policy solutions to the problem of interstate ozone transport going back to the NOx SIP Call have necessitated the application of a uniform framework of policy judgments in order to ensure an "efficient and equitable" approach. *See EME Homer City Generation, LP v. EPA*, 572 U.S. 489, 519 (2014).

In the March, August, and October 2018 memoranda, the EPA recognized that states may be able to establish alternative approaches to addressing their interstate transport obligations for the 2015 8-hour ozone NAAQS that vary from a nationally uniform framework. The EPA emphasized in these memoranda, however, that such alternative approaches must be technically justified and appropriate in light of the facts and circumstances of each particular state's submittal. In general, the EPA continues to believe that deviation from a nationally consistent approach to ozone transport must be substantially justified and have a well-documented technical basis that is consistent with relevant case law. Where states submitted SIPs that rely on any such potential "flexibilities" as may have been identified or suggested in the past, the EPA will evaluate whether the state adequately justified the technical and legal basis for doing so.

The EPA notes that certain concepts included in an attachment to the March 2018 memorandum require unique consideration, and these ideas do not constitute agency guidance with respect to transport obligations for the 2015 ozone NAAQS. Attachment A to the March 2018 memorandum identified a "Preliminary List of Potential Flexibilities" that could potentially inform SIP development. However, the EPA made clear in that Attachment that the list of ideas were not suggestions endorsed by the Agency but rather "comments provided in various forums" on which the EPA sought "feedback from interested stakeholders." Further, Attachment A stated, "EPA is not at this time making any determination that the ideas discussed below are consistent with the requirements of the CAA, nor are we specifically recommending that states

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<sup>&</sup>lt;sup>19</sup> March 2018 memorandum, Attachment A.

<sup>&</sup>lt;sup>20</sup> *Id*. at A-1.

use these approaches."<sup>21</sup> Attachment A to the March 2018 memorandum, therefore, does not constitute agency guidance, but was intended to generate further discussion around potential approaches to addressing ozone transport among interested stakeholders. To the extent states sought to develop or rely on these ideas in support of their SIP submittals, the EPA will thoroughly review the technical and legal justifications for doing so.

The remainder of this section describes the EPA's proposed framework with respect to analytic year, definition of nonattainment and maintenance receptors, selection of contribution threshold, and multifactor control strategy assessment.

# 1. Selection of Analytic year

In general, the states and the EPA must implement the interstate transport provision in a manner "consistent with the provisions of [title I of the CAA.]" CAA section 110(a)(2)(D)(i). This requires, among other things, that these obligations are addressed consistently with the timeframes for downwind areas to meet their CAA obligations. With respect to ozone NAAQS, under CAA section 181(a), this means obligations must be addressed "as expeditiously as practicable" and no later than the schedule of attainment dates provided in CAA section 181(a)(1).<sup>22</sup> Several D.C. Circuit court decisions address the issue of the relevant analytic year for the purposes of evaluating ozone transport air-quality problems. On September 13, 2019, the D.C. Circuit issued a decision in *Wisconsin v. EPA*, remanding the CSAPR Update to the extent that it failed to require upwind states to eliminate their significant contribution by the next applicable attainment date by which downwind states must come into compliance with the NAAQS, as established under CAA section 181(a). 938 F.3d at 313.

<sup>&</sup>lt;sup>21</sup> *Id*.

<sup>&</sup>lt;sup>22</sup> For attainment dates for the 2015 8-hour ozone NAAQS, refer to CAA section 181(a), 40 CFR 51.1303, and Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, 83 FR 25776 (June 4, 2018, effective Aug. 3, 2018).

On May 19, 2020, the D.C. Circuit issued a decision in Maryland v. EPA that cited the Wisconsin decision in holding that the EPA must assess the impact of interstate transport on air quality at the next downwind attainment date, including Marginal area attainment dates, in evaluating the basis for the EPA's denial of a petition under CAA section 126(b). Maryland v. EPA, 958 F.3d 1185, 1203-04 (D.C. Cir. 2020). The court noted that "section 126(b) incorporates the Good Neighbor Provision," and, therefore, "EPA must find a violation [of section 126] if an upwind source will significantly contribute to downwind nonattainment at the next downwind attainment deadline. Therefore, the agency must evaluate downwind air quality at that deadline, not at some later date." Id. at 1204 (emphasis added). The EPA interprets the court's holding in *Maryland* as requiring the states and the Agency, under the good neighbor provision, to assess downwind air quality as expeditiously as practicable and no later than the next applicable attainment date, <sup>23</sup> which is now the Moderate area attainment date under CAA section 181 for ozone nonattainment. The Moderate area attainment date for the 2015 8-hour ozone NAAOS is August 3, 2024.<sup>24</sup> The EPA believes that 2023 is now the appropriate year for analysis of interstate transport obligations for the 2015 8-hour ozone NAAQS because the 2023 ozone season is the last relevant ozone season during which achieved emissions reductions in linked upwind states could assist downwind states with meeting the August 3, 2024 Moderate area attainment date for the 2015 8-hour ozone NAAOS.

The EPA recognizes that the attainment date for nonattainment areas classified as

Marginal for the 2015 8-hour ozone NAAQS was August 3, 2021. Under the *Maryland* holding,

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<sup>&</sup>lt;sup>23</sup> We note that the court in *Maryland* did not have occasion to evaluate circumstances in which the EPA may determine that an upwind linkage to a downwind air quality problem exists at Steps 1 and 2 of the interstate transport framework by a particular attainment date, but for reasons of impossibility or profound uncertainty the Agency is unable to mandate upwind pollution controls by that date. *See Wisconsin*, 938 F.3d at 320. The D.C. Circuit noted in *Wisconsin* that upon a sufficient showing, these circumstances may warrant flexibility in effectuating the purpose of the interstate transport provision.

<sup>&</sup>lt;sup>24</sup> See CAA section 181(a); 40 CFR 51.1303; Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards, 83 FR 25776 (June 4, 2018, effective Aug. 3, 2018).

any necessary emissions reductions to satisfy interstate transport obligations should have been implemented by no later than this date. At the time of the statutory deadline to submit interstate transport SIPs (October 1, 2018), many states relied upon the EPA modeling of the year 2023, and no state provided an alternative analysis using a 2021 analytic year (or the prior 2020 ozone season). However, the EPA must act on SIP submittals using the information available at the time it takes such action. In this circumstance, the EPA does not believe it would be appropriate to evaluate states' obligations under CAA section 110(a)(2)(D)(i)(I) as of an attainment date that is wholly in the past, because the Agency interprets the interstate transport provision as forward looking. *See* 86 FR at 23074; *see also Wisconsin*, 938 F.3d at 322. Consequently, in this proposal the EPA will use the analytical year of 2023 to evaluate each state's CAA section 110(a)(2)(D)(i)(I) SIP submission with respect to the 2015 8-hour ozone NAAQS.

# 2. Step 1 of the 4-step Interstate Transport Framework

In Step 1, the EPA identifies monitoring sites that are projected to have problems attaining and/or maintaining the NAAQS in the 2023 analytic year. Where the EPA's analysis shows that a site does not fall under the definition of a nonattainment or maintenance receptor, that site is excluded from further analysis under the EPA's 4-step interstate transport framework. For sites that are identified as a nonattainment or maintenance receptor in 2023, we proceed to the next Step of our 4-step interstate transport framework by identifying the upwind state's contribution to those receptors.

The EPA's approach to identifying ozone nonattainment and maintenance receptors in this action is consistent with the approach used in previous transport rulemakings. The EPA's approach gives independent consideration to both the "contribute significantly to nonattainment"

and the "interfere with maintenance" prongs of CAA section 110(a)(2)(D)(i)(I), consistent with the D.C. Circuit's direction in *North Carolina v. EPA*.<sup>25</sup>

For the purpose of this proposal, the EPA identifies nonattainment receptors as those monitoring sites that are projected to have average design values that exceed the NAAQS and that are also measuring nonattainment based on the most recent monitored design values. This approach is consistent with prior transport rulemakings, such as the CSAPR Update, where the EPA defined nonattainment receptors as those areas that both currently measure nonattainment and that the EPA projects will be in nonattainment in the future analytic year (i.e., 2023).<sup>26</sup>

In addition, in this proposal, the EPA identifies a receptor to be a "maintenance" receptor for purposes of defining interference with maintenance, consistent with the method used in the CSAPR and upheld by the D.C. Circuit in *EME Homer City Generation, L.P. v. EPA*, 795 F.3d 118, 136 (D.C. Cir. 2015).<sup>27</sup> Specifically, the EPA identified maintenance receptors as those receptors that would have difficulty maintaining the relevant NAAQS in a scenario that takes into account historical variability in air quality at that receptor. The variability in air quality was determined by evaluating the "maximum" future design value at each receptor based on a projection of the maximum measured design value over the relevant period. The EPA interprets the projected maximum future design value to be a potential future air quality outcome consistent with the meteorology that yielded maximum measured concentrations in the ambient data set analyzed for that receptor (i.e., ozone conducive meteorology). The EPA also recognizes that previously experienced meteorological conditions (e.g., dominant wind direction, temperatures, air mass patterns) promoting ozone formation that led to maximum concentrations in the

<sup>&</sup>lt;sup>25</sup> See North Carolina v. EPA, 531 F.3d 896, 910-11 (D.C. Cir. 2008) (holding that the EPA must give "independent significance" to each prong of CAA section 110(a)(2)(D)(i)(I)).

<sup>&</sup>lt;sup>26</sup> See 81 FR 74504 (October 26, 2016). This same concept, relying on both current monitoring data and modeling to define nonattainment receptor, was also applied in CAIR. See 70 FR at 25241, 25249 (January 14, 2005); see also North Carolina, 531 F.3d at 913-14 (affirming as reasonable EPA's approach to defining nonattainment in CAIR).

<sup>&</sup>lt;sup>27</sup> See 76 FR 48208 (August 8, 2011). CSAPR Update and Revised CSAPR Update also used this approach. See 81 FR 74504 (October 26, 2016) and 86 FR 23054 (April 30, 2021).

measured data may reoccur in the future. The maximum design value gives a reasonable projection of future air quality at the receptor under a scenario in which such conditions do, in fact, reoccur. The projected maximum design value is used to identify upwind emissions that, under those circumstances, could interfere with the downwind area's ability to maintain the NAAQS.

Recognizing that nonattainment receptors are also, by definition, maintenance receptors, the EPA often uses the term "maintenance-only" to refer to those receptors that are not nonattainment receptors. Consistent with the concepts for maintenance receptors, as described above, the EPA identifies "maintenance-only" receptors as those monitoring sites that have projected average design values above the level of the applicable NAAQS, but that are not currently measuring nonattainment based on the most recent official design values. In addition, those monitoring sites with projected average design values below the NAAQS, but with projected maximum design values above the NAAQS are also identified as "maintenance only" receptors, even if they are currently measuring nonattainment based on the most recent official design values.

#### 3. Step 2 of the 4-step Interstate Transport Framework

In Step 2 the EPA quantifies the contribution of each upwind state to each receptor in the 2023 analytic year. The contribution metric used in Step 2 is defined as the average impact from each state to each receptor on the days with the highest ozone concentrations at the receptor based on the 2023 modeling. If a state's contribution value does not equal or exceed the threshold of 1 percent of the NAAQS (i.e., 0.70 ppb for the 2015 8-hour ozone NAAQS), the upwind state is not "linked" to a downwind air quality problem, and the EPA, therefore, concludes that the state does not significantly contribute to nonattainment or interfere with maintenance of the NAAQS in the downwind states. However, if a state's contribution equals or exceeds the 1 percent threshold, the state's emissions are further evaluated in Step 3, considering

both air quality and cost as part of a multi-factor analysis, to determine what, if any, emissions might be deemed "significant" and, thus, must be eliminated under CAA section 110(a)(2)(D)(i)(I). The EPA is proposing to rely in the first instance on the 1 percent threshold for the purpose of evaluating a state's contribution to nonattainment or maintenance of the 2015 8-hour ozone NAAQS (i.e., 0.70 ppb) at downwind receptors. This is consistent with the Step 2 approach that the EPA applied in CSAPR for the 1997 ozone NAAQS, which has subsequently been applied in the CSAPR Update when evaluating interstate transport obligations for the 2008 ozone NAAQS. The EPA continues to find 1 percent to be an appropriate threshold. For ozone, as the EPA found in the Clean Air Interstate Rule (CAIR), CSAPR, and CSAPR Update, a portion of the nonattainment problems from anthropogenic sources in the U.S. results from the combined impact of relatively small contributions from many upwind states, along with contributions from in-state sources and, in some cases, substantially larger contributions from a subset of particular upwind states. The EPA's analysis shows that much of the ozone transport problem being analyzed in this proposed rule is still the result of the collective impacts of contributions from many upwind states. Therefore, application of a consistent contribution threshold is necessary to identify those upwind states that should have responsibility for addressing their contribution to the downwind nonattainment and maintenance problems to which they collectively contribute. Continuing to use 1 percent of the NAAOS as the screening metric to evaluate collective contribution from many upwind states also allows the EPA (and states) to apply a consistent framework to evaluate interstate emissions transport under the interstate transport provision from one NAAQS to the next. See 81 FR at 74518. See also 86 FR at 23085 (reviewing and explaining rationale from CSAPR, 76 FR at 48237-38, for selection of the 1 percent threshold).

The EPA's August 2018 memorandum recognized that in certain circumstances, a state may be able to establish that an alternative contribution threshold of 1 ppb is justifiable. Where a state relies on this alternative threshold, and where that state determined that it was not linked at

Step 2 using the alternative threshold, the EPA will evaluate whether the state provided a technically sound assessment of the appropriateness of using this alternative threshold based on the facts and circumstances underlying its application in the particular SIP submission.

#### 4. Step 3 of the 4-step Interstate Transport Framework

Consistent with the EPA's longstanding approach to eliminating significant contribution or interference with maintenance, at Step 3, states linked at Steps 1 and 2 are generally expected to prepare a multifactor assessment of potential emissions controls. The EPA's analysis at Step 3 in prior Federal actions addressing interstate transport requirements has primarily focused on an evaluation of cost-effectiveness of potential emissions controls (on a marginal cost-per-ton basis), the total emissions reductions that may be achieved by requiring such controls (if applied across all linked upwind states), and an evaluation of the air quality impacts such emissions reductions would have on the downwind receptors to which a state is linked; other factors may potentially be relevant if adequately supported. In general, where the EPA's or alternative air quality and contribution modeling establishes that a state is linked at Steps 1 and 2, it will be insufficient at Step 3 for a state merely to point to its existing rules requiring control measures as a basis for approval. In general, the emissions-reducing effects of all existing emissions control requirements are already reflected in the air quality results of the modeling for Steps 1 and 2. If the state is shown to still be linked to one or more downwind receptor(s), states must provide a well-documented evaluation determining whether their emissions constitute significant contribution or interference with maintenance by evaluating additional available control opportunities by preparing a multifactor assessment. While the EPA has not prescribed a particular method for this assessment, the EPA expects states at a minimum to present a sufficient technical evaluation. This would typically include information on emissions sources, applicable control technologies, emissions reductions, costs, cost effectiveness, and downwind

air quality impacts of the estimated reductions, before concluding that no additional emissions controls should be required.<sup>28</sup>

#### 5. Step 4 of the 4-step Interstate Transport Framework

At Step 4, states (or the EPA) develop permanent and federally enforceable control strategies to achieve the emissions reductions determined to be necessary at Step 3 to eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS. For a state linked at Steps 1 and 2 to rely on an emissions control measure at Step 3 to address its interstate transport obligations, that measure must be included in the state's SIP so that it is permanent and federally enforceable. *See* CAA section 110(a)(2)(D) ("Each such [SIP] shall . . . contain adequate provisions . . . ."). *See also* CAA 110(a)(2)(A); *Committee for a Better Arvin v. U.S. E.P.A.*, 786 F.3d 1169, 1175-76 (9th Cir. 2015) (holding that measures relied on by state to meet CAA requirements must be included in the SIP).

# II. SIP Submissions Addressing Interstate Transport of Air Pollution for the 2015 8-hour ozone NAAQS

#### A. New York

On September 25, 2018, the New York State Department of Environmental Conservation (NYSDEC) submitted a revision to its SIP addressing the infrastructure SIP requirements for the 2015 ozone NAAQS, including the interstate transport obligations pursuant to the good neighbor

rulemakings, the EPA has developed emissions inventories, analyzed different levels of control stringency at different cost thresholds, and assessed resulting downwind air quality

improvements.

<sup>&</sup>lt;sup>28</sup> As examples of general approaches for how such an analysis could be conducted for their sources, states could look to the CSAPR Update, 81 FR 74504, 74539-51; CSAPR, 76 FR 48208, 48246-63; CAIR, 70 FR 25162, 25195-229; or the NOX SIP Call, 63 FR 57356, 57399-405. *See also* Revised CSAPR Update, 86 FR 23054, 23086-23116. Consistently across these

provision. The EPA finalized approval of elements of New York's submittal, except for the portion of the SIP submittal addressing the good neighbor provision, on June 23, 2021.<sup>29</sup>

In New York's SIP submittal, the State followed the 4-step framework for determining its good neighbor obligations. New York provided air quality modeling (Steps 1 and 2) and a list of already-enacted and "on-the-way" state air pollution control measures to conclude that New York satisfied its good neighbor obligations for the 2015 ozone NAAQS (under Step 3). The State did not reach Step 4 of the framework as it concluded that the State did not need additional emissions reductions at Step 3 to eliminate significant contribution.

At Step 1, New York identified nonattainment and maintenance receptors based on the EPA's 2023 projection modeling shared in the EPA March 2018 memorandum. New York identified nonattainment receptors at the Stratford (receptor ID 90013007) and Westport (receptor ID 90019003) monitoring sites in Fairfield County, in Connecticut, in 2023 and identified maintenance receptors at the Greenwich (receptor ID 900190017) and New Haven (receptor ID 90099002) monitoring sites in Fairfield and New Haven Counties, in Connecticut, respectively, in 2023.

New York submitted state-by-state contribution modeling for 2023 based on CAMx modeling performed by the Maryland Department of the Environment (MDE). New York coupled 2023 Community Multiscale Air Quality (CMAQ) projection modeling with MDE's CAMx contribution modeling to show that New York was linked to the Stratford, Westport, Greenwich, and New Haven monitoring sites in Connecticut using a 1 percent of the NAAQS threshold (0.70 ppb for the 2015 8-hour ozone NAAQS). Based on this information, New York conceded that it was linked to four Connecticut receptors at Step 2.

New York asserted that, despite its contributions, the State had met its good neighbor obligations through the implementation and enforcement of stringent  $NO_X$  and VOC control measures that the State asserted go well beyond the EPA presumptive cost threshold in the

<sup>&</sup>lt;sup>29</sup> 86 FR 35034 (July 1, 2021).

CSAPR Update for highly cost-effective emissions reductions, and through the ongoing adoption and revision of additional control measures to further ensure the reduction of ozone in both New York State and downwind areas.

New York cited its Reasonably Available Control Technology (RACT) rules, which have been required on major sources of NOx throughout the State since 1995, and have been periodically updated (in 1999, 2004, and 2010) to keep up with advances in control technology. New York indicated that the State's RACT presumptive emissions limits and facility-specific emissions limits are based on inflation-adjusted control cost valued at \$5,500 per ton of NOx reduced, which New York indicated was consistent with typical costs to install selective catalytic reduction (SCR) units, and above the EPA's \$1,400 per ton control cost threshold used for the CSAPR Update that reflected the cost of turning on already-existing SCR controls at EGUs. New York also noted that the State's EGU NO<sub>X</sub> emissions rates are among the lowest in the country, as reflected in its CSAPR Update ozone season emissions budget, which is lower than all other states with the exception of New Jersey and Maryland. New York indicated that its \$5,500 RACT control cost also applied to non-EGUs.

New York also stated in the September 2018 submittal that it was in various stages of the rulemaking process for additional measures to further control  $NO_X$  and VOC emissions from EGU, non-EGU, area, and mobile sources.

Additional NO<sub>X</sub> reductions would be obtained, according to the State, through the following regulatory updates that were, at the time of the submittal, under development by the State: establishing new NO<sub>X</sub> limits for simple cycle combustion turbines (or "peaking"<sup>30</sup> units), which New York noted would benefit the New York Metropolitan Area on hot summer days that are most conducive to ozone formation (i.e., high electric demand days) (6 NYCRR Part 227);

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<sup>&</sup>lt;sup>30</sup> Simple cycle combustion turbines, also known as peaking units (peakers), run to meet electric load during periods of peak electricity demand. These peakers typically operate during periods of elevated temperature when electric demand increases. Older simple cycle combustion turbines sometimes have no or only low-level NO<sub>X</sub> emission controls.

establishing NOx limits for distributed generation sources (6 NYCRR Part 222); applying NOx RACT requirements to municipal waste combustors (6 NYCRR Part 219); requiring new installation, recordkeeping and reporting requirements for aftermarket catalytic converters (Part 218); and the adoption of the CSAPR Update trading program (6 NYCRR Part 243).

New York's submittal also indicates that it will further control area-source VOC emissions through updates to State VOC RACT regulations for Oil and Gas (6 NYCRR Part 203); Architectural and Industrial Maintenance Coatings (6 NYCRR Part 205); Solvent Metal Cleaning Processes (Part 226); Motor Vehicle and Mobile Equipment Refinishing and Recoating Operations (6 NYCRR Part 228, Subpart 228-1); Gasoline Dispensing Sites and Transport Vehicles (6 NYCRR Part 230); and Consumer Products (6 NYCRR Part 235).

In its submittal to the EPA, New York commented that the State's mobile on-road sector alone (without considering other state emissions) "significantly impacted downwind monitors, with 2023 contributions as high as 4.64 ppb at the Greenwich, Connecticut monitor" (receptor ID 90010017), based on CAMx modeling conducted by the University of Maryland.<sup>31</sup>

New York stated that the on-road sector is controlled through the inspection/maintenance and anti-idling standards in 6 NYCRR Part 217, "Motor Vehicle Emissions," and the implementation of the California Low-Emission Vehicle Standards under 6 NYCRR Part 218, "Emission Standards for Motor Vehicles and Motor Vehicle Engines."

#### B. New Jersey

On May 13, 2019, New Jersey submitted a SIP revision that addressed infrastructure SIP requirements for the 2015 ozone NAAQS,<sup>32</sup> including its interstate transport obligations pursuant to the good neighbor provision. Except for the portion of the SIP submittal addressing the good

<sup>32</sup> The SIP submittal also addressed the good neighbor provision for the 2008 ozone NAAQS, which EPA acted on in a separate action. The EPA proposed disapproval on October 26, 2021, at 86 FR 60602 (November 3, 2021).

<sup>&</sup>lt;sup>31</sup> See Appendix C of New York's submittal.

neighbor provision for the 2015 8-hour ozone NAAQS, the EPA will act on the portion of the submittal addressing the remaining infrastructure SIP elements for the 2015 8-hour ozone NAAQS in a separate action at a later date.

In New Jersey's SIP submittal, the State followed the 4-step framework based on a 2023 analytic year for evaluating its significant contribution. New Jersey provided air quality modeling (Steps 1 and 2), and a list of its adopted and implemented air pollution control measures, to demonstrate that it satisfied its transport obligations for the 2015 8-hour ozone NAAQS (under Step 3). The State did not reach Step 4 of the framework as it concluded that the State did not need additional emissions reductions to eliminate significant contribution at Step 3.

At Step 1, New Jersey identified areas that the State potentially significantly contributed to in other states based on 2023 regional modeling<sup>33</sup> conducted under the coordination of the Ozone Transport Commission (OTC) modeling Committee. The OTC modeling used CAMx modeling, version 6.3, to project emissions to 2023 (using a 2011 base year). OTC used the Eastern Regional Technical Advisory Committee (ERTAC) EGU Projection Tool to estimate emissions from the EGU sector.

New Jersey identified four nonattainment and four maintenance receptors in the OTC/MANE-VU 12 kilometer (km) modeling domain utilized in the OTC modeling.<sup>34</sup> The nonattainment receptors were located at the Westport<sup>35</sup> (receptor ID 90019003) monitoring site in Fairfield County, in Connecticut; the Susan Wagner (receptor ID 360850067) and Babylon (receptor ID 36103002) monitoring sites in Richmond and Suffolk Counties, respectively, in New York; and the Edgewood (receptor ID 240251001) monitoring site in Harford County, Maryland. The maintenance receptors were located at the Greenwich (receptor ID 90010017),

<sup>&</sup>lt;sup>33</sup> OTC modeling included in Appendix I of NJ submittal.

<sup>&</sup>lt;sup>34</sup> OTC modeling generally followed the EPA approach for identifying nonattainment and maintenance receptors. Monitors in the Eastern U.S. were projected as nonattainment (an average design value greater than or equal to 71 ppb) or maintenance only (a maximum design value greater than or equal to 71 ppb) of the 2015 Ozone NAAQS in 2023. The EPA's approach for identifying ozone nonattainment and maintenance receptors is defined in section I.D.2.

<sup>35</sup> Referenced as the Sherwood Island site in the New Jersey submittal.

New Haven (receptor ID 90099002) and Stratford (receptor ID 90013007) monitoring sites in Fairfield, New Haven, and Fairfield Counties, in Connecticut, respectively; and the Queens College (receptor ID 360810124) in Queens County, in New York.

New Jersey relied on the OTC 2023 regional modeling using CAMx to determine the nonattainment and maintenance sites that it was linked to as a potential significant contributor based on its contribution above 1 percent of the NAAQS (0.70 ppb for the 2015 8-hour ozone NAAQS). The OTC modeling showed that New Jersey was linked above the 1 percent threshold to four receptors, including two nonattainment receptors at the Westport monitoring site in Connecticut and at the Susan Wagner and Babylon monitoring sites in New York. Additionally, the modeling demonstrated that New Jersey was linked to maintenance receptors located at the Greenwich, New Haven, and Stratford monitoring sites in Connecticut and the Babylon monitoring site in New York.

New Jersey asserted that considering air quality, emissions reductions from the State's adopted measures, and the cost effectiveness of those measures, no additional emissions reductions from New Jersey are necessary to address its good neighbor obligations to downwind nonattainment and maintenance areas.

New Jersey noted that from 1990 to 2017, annual  $NO_X$  and VOC emissions in New Jersey have each decreased approximately 77 percent. From 2011 to 2017, annual  $NO_X$  and VOC emissions decreased 31 percent and 17 percent, respectively. From 2002 to 2017, for point sources in the State,  $NO_X$  was reduced by 81 percent and VOC emissions were reduced by 63 percent. New Jersey also noted that its point source emissions represent only about 8 percent of New Jersey's total  $NO_X$  emissions, while mobile sources were approximately 43 percent.

New Jersey stated that there has been a significant decreasing trend in 8-hour ozone design values in New Jersey, approximately 40 percent from 1988 to 2017 and 13 percent from 2011 to 2017. According to the State, the significant decrease demonstrates the impact of New Jersey control measures.

New Jersey provided a list<sup>36</sup> of its post-2002 adopted NO<sub>X</sub> and VOC control measures, including estimated cost-effectiveness (dollar (\$) per ton of NO<sub>X</sub> reduced or VOC reduced), and the EPA's approval date<sup>37</sup> for many of the measures. New Jersey notes that the State has met Reasonably Available Control Measures (RACM) and RACT requirements and has gone beyond RACM/RACT by adopting control measures more stringent than Federal rules and rules adopted by other states. Furthermore, New Jersey states that its rules are implemented statewide and not limited to the Northern New Jersey-New York-Connecticut ozone nonattainment area. New Jersey highlighted several of its control measures:

- power generation rules, including requirements for high electric demand days (HEDD) when ozone concentrations are highest. New Jersey estimates NOx emissions reduction during HEDD to be over 60 tons from a baseline without the rules;
  - municipal waste combustor controls;
- stationary reciprocating internal combustion engines (RICE) controls (as low as 37 kW) used for distributed generation or demand response (DG/DR), which the State noted are often operated on hot summer days that often coincide with high ozone days;
- mobile source controls including New Jersey's Low Emission Vehicle Program (NJ LEV) (based on California's program), which requires a certain percentage of Zero Emission Vehicles in the State, as well as its rules for vehicle idling and heavy-duty vehicle inspection and maintenance using on-board diagnostics technology: and

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<sup>&</sup>lt;sup>36</sup> Table 5 of the SIP submittal.

<sup>&</sup>lt;sup>37</sup> Control measures that the State identified as "USEPA Approval Pending" have been approved by the EPA as follows: The EPA finalized approval of the CTGs for Fiberglass Boat Manufacturing Materials; Industrial Cleaning Solvents; Miscellaneous Metal and Plastic Parts Coatings; Paper, Film, and Foil Coatings; and Natural Gas Engines and Turbines. 83 FR 50506 (October 9, 2018). The EPA approved revisions to New Jersey's I/M rules. 83 FR 21174 (May 9, 2018). The EPA finalized approval of New Jersey's Vapor Recovery 2017 Stage I and Refueling. 85 FR 36748 (June 18, 2020).

various NO<sub>X</sub> and VOC measures to address the EPA Control Techniques Guideline (CTG), NO<sub>X</sub> Alternative Control Technique (ACT) categories, and updated controls at gasoline dispensing facilities including California Air Resources Board (CARB) enhanced vapor recovery certified Phase I vapor recovery systems, dripless nozzles, and low permeation hoses.

New Jersey also asserts that it has implemented its control measures before the attainment deadlines for downwind nonattainment areas. New Jersey provides the example of the New Jersey power generation and HEDD rules being effective in 2015 or earlier. New Jersey further asserts that, when determining New Jersey's significant contribution to interstate transport, the State should not be penalized for its early adoption of appropriate and effective rules in advance of and more stringent than other states.

In the State's evaluation of cost effectiveness, New Jersey claims that it has gone beyond the measures of other nearby and upwind states and previously established the EPA cost effectiveness thresholds. The State notes that the cost-effectiveness values associated with many of its adopted rules are several times greater than the threshold of \$1,400 per ton NO<sub>X</sub> reduced set for upwind states in the CSAPR Update. For example, according to the State's list of existing NO<sub>x</sub> and VOC control measures<sup>38</sup> included in its SIP submittal, the control measures for turbines operating during HEDD had a cost effectiveness of \$44,000 per ton NO<sub>X</sub> reduced; the control measures for oil-fired boilers operating during HEDD had a cost effectiveness up to \$18,000 per ton NO<sub>x</sub> reduced; and, for natural gas compressor engines and turbines rules adopted in 2017, the rules have a cost effectiveness up to \$26,020 per ton NO<sub>X</sub> reduced, with SCR costs up to \$18,983 per ton NO<sub>X</sub> reduced.

#### **III. EPA Evaluation**

<sup>&</sup>lt;sup>38</sup> Table 5 of the New Jersey SIP submittal.

The EPA is proposing to find that the New York SIP revision submitted on September 25, 2018, and the New Jersey SIP revision submitted on May 13, 2019, do not meet the States' obligations with respect to prohibiting emissions that contribute significantly to nonattainment or interfere with maintenance of the 2015 8-hour ozone NAAQS in any other state based on the EPA's evaluation of the SIP submissions using the 4-step interstate transport framework. Both States conceded that they are linked to nonattainment and maintenance receptors in another state at Steps 1 and 2 of the 4-step interstate transport framework-which is confirmed by the EPA's most recent modeling. However, neither state conducted an adequate Step 3 analysis to conclude that either state's SIP contains adequate measures to prohibit significant contribution or interference with maintenance. Both states conclude that their existing (or certain "on-the-way") control measures are already sufficient to meet good neighbor obligations. However, for this argument to provide support for their conclusions, an analysis as to why no additional control measures are justified is needed. Neither state provided such an analysis in their respective SIP submittals. Therefore, as discussed below, the EPA proposes to disapprove both New York's and New Jersey's good neighbor SIP submittals for the 2015 8-hour ozone NAAQS.

## A. New York

1. Results of the EPA's Step 1 and Step 2 modeling and findings for New York

As described in section I, the EPA performed air quality modeling using the 2016v2 emissions platform to project design values and contributions for 2023. These data were examined to determine if New York contributes at or above the threshold of 1 percent of the 2015 8-hour ozone NAAQS (0.70 ppb) to any downwind nonattainment or maintenance receptor. As shown in Table 1, the data<sup>39</sup> indicate that in 2023, emissions from New York contribute

<sup>&</sup>lt;sup>39</sup> Design values and contributions at individual monitoring sites nationwide are provide in the file: 2023\_DVs\_Contributions\_2016v2\_Platform which is included in docket ID No. EPA-HQ-OAR-2021-0663.

greater than 1 percent of the standard to nonattainment or maintenance-only receptors in Stratford, Connecticut (receptor ID 90013007), Westport, Connecticut (receptor ID 90019003), Greenwich, Connecticut (receptor ID 90010017), New Haven, Connecticut (receptor ID 90099002), and Bucks County, Pennsylvania (receptor ID 480170012).

Table 1: New York Linkage Results Based on EPA Updated 2023 Modeling								
Receptor ID	Location	Nonattainment/	2023	2023	New York			
		Maintenance	Average	Maximum	Contribution (ppb)			
			Design	Design Value				
			Value (ppb)	(ppb)				
90013007	Stratford, CT	Nonattainment	74.2	75.1	13.56			
90019003	Westport, CT	Nonattainment	76.1	76.4	14.36			
90010017	Greenwich,	Nonattainment	73.0	73.7	16.81			
	CT							
90099002	New Haven,	Nonattainment	71.8	73.9	11.54			
	CT							
420170012	Bucks	Maintenance	70.7	72.2	1.80			
	County, PA							

# 2. Evaluation of information provided by New York regarding Step 1

At Step 1 of the 4-step interstate transport framework, New York relied on EPA modeling released in the March 2018 memorandum to identify nonattainment and maintenance receptors in 2023. As described previously in this notice, the EPA has recently updated this modeling using the most current and technically appropriate information. The EPA proposes to primarily rely on the EPA's most recent modeling to identify nonattainment and maintenance receptors in 2023.

#### 3. Evaluation of information provided by New York regarding Step 2

As described previously in this notice, the EPA has recently updated modeling to identify upwind state contributions to nonattainment and/or maintenance receptors in 2023. In this

<sup>&</sup>lt;sup>40</sup> These modeling results are consistent with the results of a prior round of 2023 modeling using the 2016v1 emissions platform which became available to the public in the fall of 2020 in the Revised CSAPR Update, as noted in Section I.

proposal, the EPA relies on the Agency's most recently available modeling to identify upwind contributions and "linkages" to downwind air quality problems in 2023 using a threshold of 1 percent of the NAAQS. As shown in Table 1, updated EPA modeling identifies New York's maximum contribution to a downwind nonattainment or maintenance receptor is greater than 1 percent of the standard (i.e., 0.70 ppb).

Although New York relied on alternative modeling to the EPA's modeling at Step 2, New York acknowledged in its SIP submission that it is linked above 1 percent of the NAAQS to one or more downwind receptors in 2023. Because the alternative modeling relied on by the State also demonstrates that a linkage exists between the State and downwind receptors at Step 2, the EPA need not conduct a comparative assessment of the alternative modeling; the State concedes that it is linked. New York's analysis corroborates the conclusion in the EPA's most recent modeling. The EPA therefore will proceed to Step 3 of the 4-step interstate transport framework to assess arguments the State presented as to why, despite this linkage, the State should not be considered to significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other state such that additional emissions reductions are required.

## 4. Evaluation of information provided regarding Step 3

At Step 3 of the 4-step interstate transport framework, a state's emissions are further evaluated, in light of multiple factors, including air quality and cost considerations, to determine what, if any, emissions significantly contribute to nonattainment or interfere with maintenance and, thus, must be eliminated under CAA section 110(a)(2)(D)(i)(I). To effectively evaluate which emissions in the state should be deemed "significant" and therefore prohibited, states generally should prepare an accounting of sources and other emissions activity and assess potential, additional emissions reduction opportunities and resulting downwind air quality improvements. The EPA has consistently applied this general approach (i.e., Step 3 of the 4-step

interstate transport framework) when identifying emissions contributions that the Agency has determined to be "significant" (or interfere with maintenance) in each of its prior Federal, regional ozone transport rulemakings, and this interpretation of the statute has been upheld by the Supreme Court. See EME Homer City, 572 U.S. 489, 519 (2014). While the EPA has not directed states that they must conduct a Step 3 analysis in precisely the manner the EPA has done in its prior regional transport rulemakings, state implementation plans addressing the obligations in CAA section 110(a)(2)(D)(i)(I) must prohibit "any source or other type of emissions activity within the State" from emitting air pollutants which will contribute significantly to downwind air quality problems. Thus, states must complete something similar to the EPA's analysis (or an alternative approach to defining "significance" that comports with the statute's objectives) to determine whether and to what degree emissions from a state should be "prohibited" to eliminate emissions that will "contribute significantly to nonattainment in, or interfere with maintenance of," the NAAQS in any other state. New York did not conduct such an analysis in its SIP submission. Although in this action we are relying on the results of the EPA's most recent air quality modeling results for receptor identification and contributions, we will continue to evaluate the analysis provided by New York at Step 3 to assess whether the analysis provided adequately supports New York's conclusion, and whether the analysis could apply to the linkages identified by the EPA at Step 2.

As previously indicated in section II.A, New York asserted in its September 2018 submittal that, despite its contributions, the State had met its good neighbor obligations through the implementation and enforcement of stringent NO<sub>X</sub> and VOC control measures that go beyond the EPA's presumptive cost threshold in the CSAPR Update for highly cost-effective emissions reductions, and through the ongoing adoption and revision of additional control measures to further ensure the reduction of ozone in both New York and downwind areas.

The State's submittal, however, did not contain a demonstration at Step 3 that the State was adequately controlling its emissions for the purposes of the good neighbor provision,

particularly because New York conceded in its submission that its emissions were linked to Connecticut receptors at Steps 1 and 2. The SIP submittal pointed to the State's existing NO<sub>X</sub> RACT measures with presumptive and facility-specific emission limits based on \$5,500 per ton of NO<sub>X</sub> reduced, as well as ongoing state and local emission control efforts to conclude New York is already meeting its good neighbor obligations for the 2015 8-hour ozone NAAQS. However, the State's submittal does not include a sufficient examination or a technical justification that could support the conclusion that the State has no further good neighbor obligations for the 2015 8-hour ozone NAAQS. In particular, the State did not conduct in its submittal an analysis of potential additional emissions-reduction measures to further reduce its impact on the identified downwind receptors. For example, New York did not include in its submission an accounting of sources and other emissions activity in the State along with an analysis of potential NO<sub>X</sub> emissions control technologies, their associated costs, estimated emissions reductions, and downwind air quality improvements. Nor does the submittal include an analysis of whether such potential additional control technologies or measures could reduce the impact of New York's emissions on out of state receptors. Though there is not a prescribed method for a Step 3 analysis, EPA has consistently applied Step 3 of the good neighbor framework through a more rigorous evaluation of potential additional control technologies or measures than what was provided in the SIP submission. Identifying a range of various emissions control measures that have been or may be enacted at the state or local level, without analysis of the impact of those measures on the out of state receptors, is not analytically sufficient. In general, the air quality modeling that the EPA has conducted (as well the modeling relied on by New York in its submittal) already accounts for "on-the-books" emissions control measures. Both sets of modeling clearly establish continued linkage from New York to downwind receptors in 2023 at Steps 1 and 2, despite those emissions control efforts.

New York's September 2018 submittal referenced regulatory updates that New York asserted were in development and would provide for additional  $NO_X$  and VOC reductions. The

EPA notes that New York has since adopted many of these regulatory updates.<sup>41</sup> New York adopted 6 NYCRR Part 227, Subpart 227-3, "Ozone Season Oxides of Nitrogen (NOx) Emission Limits for Simple Cycle and Regenerative Combustion Turbines," with a State effective date of January 16, 2020, that lowered allowable NO<sub>X</sub> emissions from peaking units during the ozone season on high electric demand days, with compliance dates of May 1, 2023 (100 ppmvd<sup>42</sup>) limit), and May 1, 2025 (25 ppmvd limit for gas and 42 ppmvd limit for oil).<sup>43</sup> New York adopted a regulation, 6 NYCRR Part 222, "Distributed Generation Sources," with a State effective date of March 25, 2020, that established NO<sub>X</sub> emissions control requirements for distributed generation and price responsive generation sources<sup>44</sup> with compliance dates of May 1, 2021 and May 1, 2025.<sup>45</sup> New York adopted revisions, with a State effective date of March 13, 2020, to NYCRR Part 219, including adoption of a new Subpart 219-10, "Reasonably Available Control Technology (RACT) For Oxides of Nitrogen (NO<sub>X</sub>) At Municipal and Private Solid Waste Incineration Units," which established NO<sub>X</sub> limits for municipal waste combustors with a compliance date of March 14, 2021.46 New York adopted revisions to NYCRR Part 218, subpart 218-7, "Aftermarket Parts," with a State effective date of March 14, 2020, which required cleaner California certified aftermarket catalytic converters offered for sale or installed in New York State beginning January 1, 2023.<sup>47</sup> New York adopted revisions, with a State effective date

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<sup>&</sup>lt;sup>41</sup> New York regulations are available at https://www.dec.ny.gov/regulations/regulations.html.

<sup>&</sup>lt;sup>42</sup> The NO<sub>X</sub> emission limits are on a part per million dry volume basis (ppmvd), corrected to 15 percent oxygen.

<sup>&</sup>lt;sup>43</sup> New York submitted the updated regulation for SIP approval to the EPA on May 18, 2020. The EPA finalized approval on August 3, 2021. 86 FR 43956 (August 11, 2021).

<sup>&</sup>lt;sup>44</sup> Distributed generation (DG) sources are engines used by host sites to supply electricity outside that supplied by distribution utilities. This on-site generation of electricity by DG sources is used by a wide range of commercial, institutional, and industrial facilities. DG applications range from supplying electricity during blackouts to supplying all a facility's electricity demand year-round. NY's DG rule applies to sources enrolled in demand response programs sponsored by the New York Independent System Operator or transmission utilities as well as sources used during times when the cost of electricity supplied by utilities is high (i.e., price-responsive generation sources).

<sup>&</sup>lt;sup>45</sup> New York submitted the updated regulation for SIP approval to the EPA on October 15, 2020.

<sup>&</sup>lt;sup>46</sup> New York submitted the updated regulation for SIP approval to the EPA on February 23, 2021.

<sup>&</sup>lt;sup>47</sup> As of December 1, 2021, New York had not submitted a revised version of subpart 218-7 to the EPA for SIP approval.

of January 11, 2020, to 6 NYCRR Part 205, "Architectural and Industrial Maintenance Coatings," with compliance effective January 1, 2021, 48 requiring more stringent VOC limits for coatings. 49 New York adopted revisions, with a State effective date of November 1, 2019, to 6 NYCRR Part 226, "Solvent Metal Cleaning Processes," establishing VOC content limits for cleaning solvents used in operations not covered by other regulations, beginning November 1, 2020. 50 New York adopted revisions to 6 NYCRR Part 230, with a State effective date of February 11, 2021, "Gasoline Dispensing Sites and Transport Vehicles," and 6 NYCRR Part 235, "Consumer Products." Updates to NYCRR Part 230 include additional VOC control requirements for facilities during gasoline transfer operations beginning February 5, 2021. 51 Updates to Part 235, which require compliance by January 1, 2022, include revising and establishing VOC contents for consumer products. 52

Additionally, New York adopted a revised version of 6 NYCRR Part 243, "CSAPR NO<sub>X</sub> Ozone Season Group 2 Trading Program," with a State effective date of January 2, 2019, in order to allow New York to allocate CSAPR allowances to regulated entities in New York under an abbreviated SIP.<sup>53</sup> However, the EPA notes that although New York's revised Part 243 replaced the EPA's default allocation procedures for the control periods in 2021 and beyond under the CSAPR Update FIP, the revised state rules did not create any enforceable emission limitations and did not replace the enforceable emission limitations set forth in the additional trading program provisions established under the CSAPR Update FIP. Moreover, the allowance allocations provisions adopted in Part 243 (as well as the additional trading program provisions

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<sup>&</sup>lt;sup>48</sup> The compliance date for the sale of products is January 1, 2021. The sell-through provision allows for product manufactured before January 1, 2021, to be sold through May 1, 2023.

<sup>&</sup>lt;sup>49</sup> New York submitted the updated regulation for SIP approval to the EPA on October 15, 2020.

<sup>&</sup>lt;sup>50</sup> New York submitted the updated regulation for SIP approval to the EPA on November 5, 2019. The EPA finalized approval on April 19, 2020. 85 FR 28490 (May 13, 2020).

<sup>&</sup>lt;sup>51</sup> New York submitted the updated regulation for SIP approval to the EPA on March 3, 2021.

<sup>&</sup>lt;sup>52</sup> New York submitted the updated regulation for SIP approval to the EPA on March 3, 2021.

<sup>&</sup>lt;sup>53</sup> CSAPR provided a process for the submission and approval of SIP revisions to replace certain provisions of the CSAPR FIPs while the remaining FIP provisions continue to apply. This type of CSAPR SIP is termed an abbreviated SIP.

established under the CSAPR Update) are no longer in effect for New York's sources because those provisions have been replaced as to the State's sources by the new trading program provisions established under the Revised CSAPR Update.<sup>54</sup>

In any case, in both the CSAPR Update and the more recent Revised CSAPR Update, the EPA found, in spite of the nominal stringency of New York's control programs, additional emissions reductions were achievable from EGUs in the State. This was true even under the level of control stringency the EPA determined appropriate to eliminate significant contribution for the 2008 ozone NAAQS. Further, the EPA has not established a benchmark cost-effectiveness threshold for good neighbor obligations for the 2015 ozone NAAQS, and New York in its submittal has not conducted an analysis to establish one for EPA to evaluate. Additionally, while New York's existing control measures have undoubtedly reduced the amount of transported ozone pollution to other states and have contributed to the downward emissions trends and improving air quality in the State, in light of continuing contribution to out of state receptors from the State at Steps 1 and 2 despite these measures, New York's SIP submission failed to provide an adequate analysis at Step 3.

As of December 1, 2021, New York had not yet adopted revisions to 6 NYCRR Part 203, "Oil and Gas Sector," or NYCRR Part 228, Subpart 228-1, "Motor Vehicle and Mobile Equipment Refinishing and Recoating Operation."

The EPA also notes that New York's 6 NYCRR Part 227, Subpart 227-3, which was approved into the SIP after EPA's receipt of this September 2018 submittal, and which implements NO<sub>X</sub> limits on combustion turbines that operate as peaking units, will not be fully phased in until 2025, which is past the August 3, 2024 Moderate area attainment date for the

<sup>&</sup>lt;sup>54</sup> The regulations implementing the Revised CSAPR Update provide that, for states subject to the Revised CSAPR Update and with respect to control periods after 2020, the EPA will no longer administer state trading program provisions approved under SIP revisions addressing the CSAPR Update's trading program. See 40 CFR 52.38(b)(16)(ii).

<sup>&</sup>lt;sup>55</sup> New York filed a notice of proposed rulemaking on April 20, 2021. See *https://www.dec.ny.gov/regulations/122829.html*.

2015 ozone NAAQS. Additionally, New York said that the State's mobile on-road sector alone significantly impacted downwind monitors and noted that it controls its mobile emissions through its inspection/maintenance (I/M) and anti-idling standards. However, New York did not explain the role its I/M and anti-idling standards play in eliminating its significant contribution.

The EPA acknowledges that New York's RACT presumptive emissions limits and facility-specific emissions limits are based on an inflation-adjusted control cost valued at \$5,500 per ton of  $NO_X$  reduced.

In general, however, the listing of existing or "on-the-way" control measures, whether approved into the State's SIP or not, does not substitute for a complete Step 3 analysis under the EPA's 4-step framework to define "significant contribution." New York's submittal does not include an assessment of the overall effects of these measures, when the reductions would be achieved, and what the overall resulting air quality effects would be observed at identified outof-state receptors. The State's submittal does not include an evaluation of additional potential emissions control opportunities, or their costs or impacts, or attempt to analyze whether, if applied more broadly across linked states, the emissions reductions would constitute the elimination of significant contribution on a regional scale. The State's submittal did not contain an explanation as to whether any faster or more stringent emissions reductions that may be available were prohibitively costly or infeasible. Although the EPA acknowledges states are not necessarily bound to follow its own analytical framework at Step 3, we note that the State did not attempt to determine or justify an appropriate uniform cost-effectiveness threshold for the more stringent 2015 ozone NAAQS, nor did the State offer an alternative to this analytical framework for determining "significant contribution" in its submittal. This would have been similar to the approach to defining significant contribution that the EPA has applied in prior rulemakings such as CSAPR and the CSAPR Update.

Further, the EPA's modeling already accounts for "on-the-books" control measures, and the State has not explained which of its measures were not already included in the EPA's

modeling and thus deserve to be further credited as reducing the impact of the State's emissions beyond what the EPA's air quality modeling has already accounted for. In light of continuing contribution to out of state receptors from the State (at Steps 1 and 2) despite these measures, New York's SIP submission failed to evaluate the availability of any additional controls to improve downwind air quality at nonattainment and maintenance receptors at Step 3.

Finally, under the *Wisconsin* decision, states and the EPA may not delay implementation of measures necessary to address good neighbor requirements beyond the next applicable attainment date without a showing of impossibility or necessity. See 938 F.3d at 320. In those cases where the measures identified by the State had implementation timeframes beyond the next relevant attainment dates the submission did not offer a demonstration of impossibility of earlier implementation of those control measures. <sup>56</sup> Similarly, the State's submittal is insufficient to the extent the implementation timeframes for identified control measures were left unidentified, unexplained, or too uncertain to permit the EPA to form a judgment as to whether the timing requirements for good neighbor obligations have been met.

#### 5. Evaluation of information provided regarding Step 4

Step 4 of the 4-step interstate transport framework calls for development of permanent and federally enforceable control strategies to achieve the emissions reductions determined to be necessary at Step 3 to eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS. New York identified a number of measures that were either in development or anticipated to occur in the future (See section III.4).<sup>57</sup> However, the State had not

<sup>&</sup>lt;sup>56</sup> While *Wisconsin* was decided after the state made its submission, EPA must evaluate the SIP based on the information available at the time of its action, including any relevant changes in caselaw or other requirements. States are generally free to withdraw and resubmit their SIP submissions in light of intervening changes in the law. The State of New York has not done so in this case.

<sup>&</sup>lt;sup>57</sup> Pointing to anticipated upcoming emission reductions, even if they were not included in the analysis at Steps 1 and 2, is not sufficient as a Step 3 analysis, for the reasons discussed in Section III.A.4. In this section, we explain that to the extent such anticipated reductions are not

revised its SIP to include these emission reductions to ensure the reductions were permanent and enforceable. Although New York has subsequently adopted many of the measures identified in section III.4, several measures have not been approved into the SIP, either because the State failed to submit (e.g., 6 NYCRR Part 218, Subpart 218-7, "Aftermarket Parts) or the EPA has not yet finalized approval into the SIP. Therefore, the emission reductions associated with those rules are not permanent and enforceable. As a result, EPA proposes to disapprove New York's submittal on the separate, additional basis that New York has not included permanent and enforceable emissions reductions in its SIP as necessary to meet the obligations of 110(a)(2)(d)(i)(I).

#### 6. Conclusion

Based on the EPA's evaluation of New York's' SIP submission, the EPA is proposing to find that the portion of New York's September 25, 2018 SIP submission addressing CAA section 110(a)(2)(D)(i)(I) does not meet the State's interstate transport obligations for the 2015 8-hour ozone NAAQS, because it fails to contain the necessary provisions to eliminate emissions in amounts that will contribute significantly to nonattainment or interfere with maintenance of the NAAQS in any other state.

#### B. New Jersey

1. Results of the EPA's Step 1 and Step 2 modeling and findings for New Jersey

As described in section I, the EPA performed air quality modeling using the 2016v2 emissions platform to project design values and contributions for 2023. These data were examined to determine if New Jersey contributes at or above the threshold of 1 percent of the

included in the SIP and rendered permanent and enforceable, reliance on such anticipated reductions is also insufficient at Step 4.

2015 8-hour ozone NAAQS (0.70 ppb) to any downwind nonattainment or maintenance receptor. As shown in Table 2, the data<sup>58</sup> indicate that in 2023 emissions from New Jersey contribute greater than 1 percent of the standard to nonattainment or maintenance-only receptors in Stratford, Connecticut (receptor ID 90013007), Westport, Connecticut (receptor ID 90019003), Greenwich, Connecticut (receptor ID 90010017), Madison, Connecticut (receptor ID 90099002), and Bucks County, Pennsylvania (receptor ID 480170012).<sup>59</sup>

Table 2: New Jersey Linkage Results Based on EPA Updated 2023 Modeling								
Receptor ID	Location	Nonattainment/	2023	2023	New Jersey			
		Maintenance	Average	Maximum	Contribution (ppb)			
			Design	Design Value				
			Value (ppb)	(ppb)				
90013007	Stratford, CT	Nonattainment	74.2	75.1	7.43			
90019003	Westport, CT	Nonattainment	76.1	76.4	8.85			
90010017	Greenwich,	Nonattainment	73.0	73.7	6.90			
	CT							
90099002	Madison, CT	Nonattainment	71.8	73.9	5.67			
420170012	Bucks	Maintenance	70.7	72.2	5.79			
	County, PA							

## 2. Evaluation of information provided by New Jersey regarding Step 1

As noted in section II.B., New Jersey submitted OTC modeling that identified nonattainment and maintenance receptors in 2023. Although the State used a different modeling approach (utilizing 2011 based modeling and the ERTAC EGU Projection tool), than the EPA's modeling, which used a 2016-based emissions platform developed under an EPA/MJO/state collaborative project, New Jersey's alternative modeling also identified a number of nonattainment and maintenance receptor sites in 2023. See page 9 of the May 30, 2019 SIP submission. New Jersey determined

<sup>&</sup>lt;sup>58</sup> Design values and contributions at individual monitoring sites nationwide are provide in the file: 2023\_DVs\_Contributions\_2016v2\_Platform which is included in docket ID No. EPA-HQ-OAR-2021-0663.

<sup>&</sup>lt;sup>59</sup> These modeling results are consistent with the results of a prior round of 2023 modeling using the 2016v1 emissions platform which became available to the public in the fall of 2020 in the Revised CSAPR Update, as noted in Section I. That modeling showed that New Jersey had a maximum contribution greater than 0.70 ppb to at least one nonattainment or maintenance-only receptor in 2023. These modeling results are included in the file "Ozone Design Values And Contributions Revised CSAPR Update.xlsx" in docket EPA-HQ-OAR-2021-0663.

York, and Maryland, which exceeded the 5 locations in Connecticut and Pennsylvania that the EPA determined to have nonattainment or maintenance problems. Based on both the New Jersey and the EPA modeling, nonattainment and maintenance receptors are projected in 2023 at Step 1. Thus, even under the alternative modeling of 2023, New Jersey acknowledges in its submittal the existence of several nonattainment and maintenance receptors.

#### 3. Evaluation of information provided by the State regarding Step 2

Although New Jersey relied on alternative modeling to the EPA's modeling at Step 2, New Jersey acknowledged in its SIP submission that it is linked above 1 percent of the NAAQS (0.70 ppb for the 2015 8-hour ozone NAAQS) to one or more downwind receptors in 2023. Because the alternative modeling relied on by the State also demonstrates that a linkage exists between the State and downwind receptors at Step 2, the EPA need not conduct a comparative assessment of the alternative modeling; the State concedes that it is linked. New Jersey's analysis corroborates the conclusion in the EPA's most recent modeling. The EPA therefore will proceed to Step 3 of the 4-step interstate transport framework to assess arguments the State presented as to why, despite this linkage, the State should not be considered to significantly contribute to nonattainment or interfere with maintenance of the NAAQS in any other state such that additional emissions reductions are required.

# 4. Evaluation of information provided regarding Step 3

At Step 3 of the 4-step interstate transport framework, a state's emissions are further evaluated, in light of multiple factors, including air quality and cost considerations, to determine

what, if any, emissions significantly contribute to nonattainment or interfere with maintenance and, thus, must be eliminated under CAA section 110(a)(2)(D)(i)(I).

To effectively evaluate which emissions in the state should be deemed "significant" and therefore prohibited, states generally should prepare an accounting of sources and other emissions activity and assess potential, additional emissions reduction opportunities and resulting downwind air quality improvements. The EPA has consistently applied this general approach (i.e., Step 3 of the 4-step interstate transport framework) when identifying emissions contributions that the Agency has determined to be "significant" (or interfere with maintenance) in each of its prior Federal, regional ozone transport rulemakings, and this interpretation of the statute has been upheld by the Supreme Court. See EME Homer City, 572 U.S. 489, 519 (2014). While the EPA has not directed states that they must conduct a Step 3 analysis in precisely the manner the EPA has done in its prior regional transport rulemakings, state implementation plans addressing the obligations in CAA section 110(a)(2)(D)(i)(I) must prohibit "any source or other type of emissions activity within the State" from emitting air pollutants which will contribute significantly to downwind air quality problems. Thus, states must complete something similar to the EPA's analysis (or an alternative approach to defining "significance" that comports with the statute's objectives) to determine whether and to what degree emissions from a state should be "prohibited" to eliminate emissions that will "contribute significantly to nonattainment in, or interfere with maintenance of," the NAAOS in any other state. New Jersey did not conduct such an analysis in its SIP submission.

As previously noted, New Jersey asserted in its May 2019 submittal that considering air quality, the emissions reductions from New Jersey's adopted measures, and the cost effectiveness of those measures, no additional emissions reductions from New Jersey are necessary to address its good neighbor obligations to downwind nonattainment and maintenance areas. New Jersey stated that control measures were adopted and implemented before attainment deadlines and go beyond previously established the EPA cost effectiveness thresholds. New

Jersey also provided information documenting the emissions reductions that have been made throughout the State beginning in 2002 with corresponding improvements in air quality in New Jersey to demonstrate the impact of New Jersey's control measures.

New Jersey's submittal, however, did not contain a demonstration at Step 3 that the State was adequately controlling its emissions for purposes of the good neighbor provision, particularly because the State conceded in its submission that it was potentially significantly contributing to eight receptors in 2023 at Steps 1 and 2. The SIP submittal pointed to the State's existing NO<sub>x</sub> and VOC control measures that were adopted by the State to conclude New Jersey is already meeting its good neighbor obligations for the 2015 8-hour ozone NAAQS. However, the State's submittal does not include a sufficient examination or a technical justification that could support the conclusion that the State has no further good neighbor obligations for the 2015 8-hour ozone NAAQS. In particular, the State did not conduct in its submittal an analysis of potential additional emissions-reduction measures to further reduce its impact on the identified downwind receptors. For example, New Jersey did not include in its submission an accounting of individual emissions units at facilities in the State along with an analysis of potential NO<sub>X</sub> emissions control technologies, their associated costs, estimated emissions reductions, and downwind air quality improvements. Nor does the submittal include an analysis of whether such potential, additional control technologies or measures could reduce the impact of New Jersey's emissions on out of state receptors. Though there is not a prescribed method for a Step 3 analysis, the EPA has consistently applied Step 3 of the good neighbor framework through a more rigorous evaluation of potential additional control technologies or measures than what New Jersey provided in its submission. Identifying a range of various emissions control measures that have been or may be enacted at the state level, without analysis of the impact of those measures on the out of state receptors, is not analytically sufficient. In general, the air quality modeling that EPA has conducted (as well the modeling relied on by New Jersey in its submittal) already accounts for "on-the-books" emissions control measures. Both sets of modeling clearly establish

continued linkage from New Jersey to downwind receptors in 2023 at Steps 1 and 2, despite those emissions control efforts.

The EPA acknowledges that the State's control measures listed in the State's SIP submittal may be nominally more stringent than the EPA cost-thresholds used for the CSAPR Update or Revised CSAPR Update. But those cost-thresholds were for the 2008 ozone NAAOS (a less stringent NAAOS than the 2015 ozone NAAOS). Further, in the Revised CSAPR Update, the EPA found that despite the nominal stringency of New Jersey's control programs, additional emissions reductions were achievable from EGUs in the State, even under the level of control stringency the EPA determined appropriate to eliminate significant contribution for the 2008 ozone NAAQS. In any case, the EPA has not established a benchmark cost-effectiveness threshold for good neighbor obligations for the 2015 ozone NAAQS, and New Jersey in its submittal has not conducted an analysis to establish one for the EPA to evaluate. Additionally, while New Jersey's existing control measures have undoubtedly reduced the amount of transported ozone pollution to other states and have contributed to the downward emissions trends and improving air quality in the State as shown in the State's SIP submittal, in light of continuing contribution to out of state receptors from the State at Steps 1 and 2 despite these measures, New Jersey's SIP submission failed to provide an adequate analysis at Step 3.

We therefore propose that New Jersey was required to analyze emissions from the sources and other emissions activity from within the state to determine whether its contributions were significant, and we propose to disapprove its submission because New Jersey failed to do so.

## 5. Evaluation of information provided regarding Step 4

Step 4 of the 4-step interstate transport framework calls for development of permanent and federally enforceable control strategies to achieve the emissions reductions determined to be

necessary at Step 3 to eliminate significant contribution to nonattainment or interference with maintenance of the NAAQS. As mentioned previously, New Jersey's SIP submission did not contain an evaluation of additional emission control opportunities (or establish that no additional controls are required), thus, no information was provided at Step 4. As a result, EPA proposes to disapprove New Jersey's submittal on the separate, additional basis that the State has not developed permanent and enforceable emissions reductions necessary to meet the obligations of CAA section 110(a)(2)(d)(i)(I).

#### 6. Conclusion

Based on the EPA's evaluation of New Jersey's SIP submission, the EPA is proposing to find that the portion of New Jersey's May 13, 2019 SIP submission addressing CAA section 110(a)(2)(D)(i)(I) does not meet the State's interstate transport obligations for the 2015 8-hour ozone NAAQS, because it fails to contain the necessary provisions to eliminate emissions in amounts that will contribute significantly to nonattainment or interfere with maintenance of the NAAQS in any other state.

#### **IV. Proposed Action**

We are proposing to disapprove the portion of New York's and New Jersey's SIP submissions pertaining to interstate transport of air pollution which will significantly contribute to nonattainment or interfere with maintenance of the 2015 8-hour ozone NAAQS in other states. Under CAA section 110(c)(1), disapproval, if finalized, would establish a 2-year deadline for the EPA to promulgate a FIP for New York and New Jersey to address interstate transport requirements for the 2015 8-hour ozone NAAQS, unless the EPA approves a SIP that meets these requirements. Disapproval does not start a mandatory sanctions clock for New York and New Jersey. The remaining elements of New York's September 25, 2018 submission, and New

Jersey's May 13, 2019 submission are not addressed in this action and either have been or will be acted on in separate rulemakings.

## V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget for review.

# B. Paperwork Reduction Act (PRA)

This proposed action does not impose an information collection burden under the PRA because it does not contain any information collection activities

#### C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action merely proposes to disapprove a SIP submission as not meeting the CAA.

#### D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

#### E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This action does not apply on any Indian reservation land, any other area where the EPA or an Indian

tribe has demonstrated that a tribe has jurisdiction, or non-reservation areas of Indian country.

Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it merely proposes to disapprove a SIP submission as not meeting the CAA.

H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution or Use This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations. This action merely proposes to disapprove a SIP submission as not meeting the CAA.

*K. CAA Section 307(b)(1)* 

Section 307(b)(1) of the CAA governs judicial review of final actions by the EPA. This section provides, in part, that petitions for review must be filed in the D.C. Circuit: (i) when the agency action consists of "nationally applicable regulations promulgated, or final actions taken, by the Administrator," or (ii) when such action is locally or regionally applicable, if "such action is based on a determination of nationwide scope or effect and if in taking such action the

Administrator finds and publishes that such action is based on such a determination." For locally or regionally applicable final actions, the CAA reserves to the EPA complete discretion whether to invoke the exception in (ii).<sup>60</sup>

The EPA anticipates that this proposed rulemaking, if finalized, would be "nationally applicable" within the meaning of CAA section 307(b)(1) because it would take final action on SIP submittals for the 2015 ozone NAAQS for two states, which are located in two different Federal judicial circuits. It would apply uniform, nationwide analytical methods, policy judgments, and interpretation with respect to the same CAA obligations, i.e., implementation of good neighbor requirements under CAA section 110(a)(2)(D)(i)(I) for the 2015 ozone NAAQS for states across the country, and final action would be based on this common core of determinations, described in further detail below.

If the EPA takes final action on this proposed rulemaking, in the alternative, the Administrator intends to exercise the complete discretion afforded to him under the CAA to make and publish a finding that the final action (to the extent a court finds the action to be locally or regionally applicable) is based on a determination of "nationwide scope or effect" within the meaning of CAA section 307(b)(1). Through this rulemaking action (in conjunction with a series of related actions on other SIP submissions for the same CAA obligations), the EPA interprets and applies section 110(a)(2)(d)(i)(I) of the CAA for the 2015 ozone NAAQS based on a common core of nationwide policy judgments and technical analysis concerning the interstate transport of pollutants throughout the continental U.S. In particular, the EPA is applying here (and in other proposed actions related to the same obligations) the same, nationally consistent 4-step framework for assessing good neighbor obligations for the 2015 ozone NAAQS. The EPA relies on a single set of updated, 2016-base year photochemical grid modeling results of the year

D.C. Circuit's authoritative centralized review versus allowing development of the issue in other contexts and the best use of agency resources.

<sup>&</sup>lt;sup>60</sup> In deciding whether to invoke the exception by making and publishing a finding that an action is based on a determination of nationwide scope or effect, the Administrator takes into account a number of policy considerations, including his judgment balancing the benefit of obtaining the

2023 as the primary basis for its assessment of air quality conditions and contributions at Steps 1 and 2 of that framework. Further, the EPA proposes to determine and apply a set of nationally consistent policy judgments to apply the 4-step framework. The EPA has selected a nationally uniform analytic year (2023) for this analysis and is applying a nationally uniform approach to nonattainment and maintenance receptors and a nationally uniform approach to contribution threshold analysis. For these reasons, the Administrator intends, if this proposed action is finalized, to exercise the complete discretion afforded to him under the CAA to make and publish a finding that this action is based on one or more determinations of nationwide scope or effect for purposes of CAA section 307(b)(1).62

# List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Ozone.

Authority: 42 U.S.C. 7401 et seq.

January 31, 2022.

Dated:

Lisa Garcia, Regional Administrator, Region 2.

[FR Doc. 2022-02946 Filed: 2/18/2022 8:45 am; Publication Date: 2/22/2022]

<sup>&</sup>lt;sup>61</sup> A finding of nationwide scope or effect is also appropriate for actions that cover states in multiple judicial circuits. In the report on the 1977 Amendments that revised section 307(b)(1) of the CAA, Congress noted that the Administrator's determination that the "nationwide scope or effect" exception applies would be appropriate for any action that has a scope or effect beyond a single judicial circuit. See H.R. Rep. No. 95-294 at 323, 324, reprinted in 1977 U.S.C.C.A.N. 1402-03.

<sup>&</sup>lt;sup>62</sup> The EPA may take a consolidated, single final action on all the proposed SIP disapproval actions with respect to obligations under CAA section 110(a)(2)(D)(i)(I) for the 2015 ozone NAAQS. Should EPA take a single final action on all such disapprovals, this action would be nationally applicable, and the EPA would also anticipate, in the alternative, making and publishing a finding that such final action is based on a determination of nationwide scope or effect.